

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 101783,710A
Source: JFWO
Date Processed by STIC: H-OS

ENTERED



IFWO

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/783,710A

DATE: 01/06/2005
TIME: 16:07:23

Input Set : D:\38-21(52743)B.rpt
Output Set: N:\CRF4\01062005\J783710A.raw

1 <110> APPLICANT: Sun, Jindong
 2 Zobrist, Kimberly
 3 Wu, Jingrui
 4 Fu, Changlin
 5 Dotson, Stanton B.
 6 Lutfiyya, Linda L.
 8 <120> TITLE OF INVENTION: Transgenic Plants
 10 <130> FILE REFERENCE: 38-21(52743)B
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/783,710A
 C--> 12 <141> CURRENT FILING DATE: 2004-02-21
 12 <150> PRIOR APPLICATION NUMBER: US 60/449,054
 14 <151> PRIOR FILING DATE: 2003-02-22
 16 <160> NUMBER OF SEQ ID NOS: 12
 18 <210> SEQ ID NO: 1
 19 <211> LENGTH: 270
 20 <212> TYPE: PRT
 21 <213> ORGANISM: Arabidopsis thaliana
 23 <400> SEQUENCE: 1
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 26 1 5 10 15
 28 Pro Thr Gly Gly Ala Thr Ser Ser Ala Thr Ala Ser Gly Ser Ser Ser
 29 20 25 30
 31 Gly Arg Arg Pro Arg Gly Arg Pro Ala Gly Ser Lys Asn Lys Pro Lys
 32 35 40 45
 34 Pro Pro Thr Ile Ile Thr Arg Asp Ser Pro Asn Val Leu Arg Ser His
 35 50 55 60
 37 Val Leu Glu Val Thr Ser Gly Ser Asp Ile Ser Glu Ala Val Ser Thr
 38 65 70 75 80
 40 Tyr Ala Thr Arg Arg Gly Cys Gly Val Cys Ile Ile Ser Gly Thr Gly
 41 85 90 95
 43 Ala Val Thr Asn Val Thr Ile Arg Gln Pro Ala Ala Pro Ala Gly Gly
 44 100 105 110
 46 Gly Val Ile Thr Leu His Gly Arg Phe Asp Ile Leu Ser Leu Thr Gly
 47 115 120 125
 49 Thr Ala Leu Pro Pro Pro Ala Pro Pro Gly Ala Gly Gly Leu Thr Val
 50 130 135 140
 52 Tyr Leu Ala Gly Gly Gln Gly Gln Val Val Gly Gly Asn Val Ala Gly
 53 145 150 155 160
 55 Ser Leu Ile Ala Ser Gly Pro Val Val Leu Met Ala Ala Ser Phe Ala
 56 165 170 175
 58 Asn Ala Val Tyr Asp Arg Leu Pro Ile Glu Glu Glu Glu Thr Pro Pro
 59 180 185 190
 61 Pro Arg Thr Thr Gly Val Gln Gln Gln Pro Glu Ala Ser Gln Ser

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62      195          200          205
64 Ser Glu Val Thr Gly Ser Gly Ala Gln Ala Cys Glu Ser Asn Leu Gln
65      210          215          220
67 Gly Gly Asn Gly Gly Gly Val Ala Phe Tyr Asn Leu Gly Met Asn
68 225          230          235          240
70 Met Asn Asn Phe Gln Phe Ser Gly Gly Asp Ile Tyr Gly Met Ser Gly
71          245          250          255
73 Gly Ser Gly Gly Gly Gly Ala Thr Arg Pro Ala Phe
74          260          265          270
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78 <211> LENGTH: 295
79 <212> TYPE: PRT
80 <213> ORGANISM: Oryza sativa
82 <400> SEQUENCE: 2
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85 1          5          10          15
87 Asp His Ala Gly Gly Ser Gly Ser Gly Gly Val Gly Gly Asp His Gln
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90 Pro Ser Ser Ser Ala Met Val Pro Val Glu Gly Gly Ser Gly Ser Ala
91          35          40          45
93 Gly Gly Ser Gly Ser Gly Gly Pro Thr Arg Arg Pro Arg Gly Arg Pro
94          50          55          60
96 Pro Gly Ser Lys Asn Lys Pro Lys Pro Pro Ile Ile Val Thr Arg Asp
97 65          70          75          80
99 Ser Pro Asn Ala Leu His Ser His Val Leu Glu Val Ala Gly Gly Ala
100          85          90          95
102 Asp Val Val Asp Cys Val Ala Glu Tyr Ala Arg Arg Arg Gly Arg Gly
103          100         105         110
105 Val Cys Val Leu Ser Gly Gly Ala Val Val Asn Val Ala Leu Arg
106          115         120         125
108 Gln Pro Gly Ala Ser Pro Pro Gly Ser Met Val Ala Thr Leu Arg Gly
109          130         135         140
111 Arg Phe Glu Ile Leu Ser Leu Thr Gly Thr Val Leu Pro Pro Pro Ala
112 145          150          155          160
114 Pro Pro Gly Ala Ser Gly Leu Thr Val Phe Leu Ser Gly Gly Gln Gly
115          165          170          175
117 Gln Val Ile Gly Gly Ser Val Val Gly Pro Leu Val Ala Ala Gly Pro
118          180          185          190
120 Val Val Leu Met Ala Ala Ser Phe Ala Asn Ala Val Tyr Glu Arg Leu
121          195          200          205
123 Pro Leu Glu Gly Glu Glu Glu Val Ala Ala Pro Ala Ala Gly Gly
124          210          215          220
126 Glu Ala Gln Asp Gln Val Ala Gln Ser Ala Gly Pro Pro Gly Gln Gln
127 225          230          235          240
129 Pro Ala Ala Ser Gln Ser Ser Gly Val Thr Gly Gly Asp Gly Thr Gly
130          245          250          255
132 Gly Ala Gly Gly Met Ser Leu Tyr Asn Leu Ala Gly Asn Val Gly Gly
133          260          265          270
135 Tyr Gln Leu Pro Gly Asp Asn Phe Gly Gly Trp Ser Gly Ala Gly Ala

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152	Lys	Lys	Pro	Arg	Gly	Arg	Pro	Ala	Gly	Ser	Lys	Asn	Lys	Pro	Lys	Ser		
153			20							25					30			
155	Pro	Ile	Ile	Val	Ala	Arg	Asp	Ser	Pro	Asn	Ser	Leu	Arg	Ser	His	Val		
156		35								40					45			
158	Leu	Glu	Ile	Ser	Ser	Gly	Ser	Asp	Ile	Val	Asp	Ser	Val	Trp	Gly	Tyr		
159		50								55					60			
161	Ala	Arg	Arg	Arg	Gly	Arg	Gly	Val	Cys	Val	Leu	Ser	Gly	Thr	Gly	Ala		
162	65				70					75					80			
164	Val	Thr	Asn	Val	Thr	Leu	Arg	Gln	Pro	Ala	Ala	Pro	Pro	Gly	Ser	Val		
165										85					95			
167	Val	Thr	Leu	His	Gly	Arg	Phe	Glu	Ile	Leu	Ser	Leu	Thr	Gly	Thr	Ser		
168										100					110			
170	Leu	Pro	Pro	Pro	Ala	Pro	Pro	Gly	Ala	Gly	Gly	Leu	Thr	Val	Tyr	Leu		
171		115								120					125			
173	Ala	Gly	Val	Gln	Gly	Gln	Val	Val	Gly	Gly	Ser	Val	Val	Gly	Pro	Leu		
174		130								135					140			
176	Met	Ala	Ser	Gly	Pro	Val	Val	Leu	Met	Ala	Ala	Ser	Phe	Ala	Asn	Ala		
177	145									150					155			160
179	Val	Tyr	Asp	Arg	Leu	Pro	Leu	Glu	Glu	Glu	Asp	Pro	Pro	Thr	Val	His		
180										165					170			175
182	Glu	Gln	Gln	Pro	Ala	Ala	Ser	Gln	Ser	Ser	Gly	Leu	Thr	Gly	Ser	Gly		
183										180					185			190
185	Gly	Gly	Asn	Asn	Asn	Asn	Cys	Gly	Thr	Thr	Gly	Thr	Gly	Val	Gly	Gly		
186										195					200			205
188	Gly	Gly	Gly	Val	Pro	Phe	Tyr	Asn	Leu	Gly	Pro	Asn	Met	Gly	Thr			
189		210								215					220			
191	Tyr	Pro	Phe	Pro	Gly	Leu												
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196	<211>	LENGTH:	974															
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204	catggaaactt	aacagatctg	aagcagacga	agcaaaggcc	gagaccactc	ccaccgggtgg										120		
206	agccaccagc	tcagccacag	cctctggctc	tccctccgga	cgtcgtccac	gtggtcgtcc										180		
208	tgcaggttcc	aaaaacaaac	ccaaacctcc	gacgattata	actagagata	gtcctaaccgt										240		
210	ccttagatca	cacgttcttg	aagtccaccc	cggttcggac	atatccgaa	cagtctccac										300		
212	ctacgccact	cgtcgccggt	gcggcggttg	cattataagc	ggcacgggtg	cggtaactaa										360		

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214	cgtcacgata	cgccaacctg	cggctccggc	tggtgaggt	gtgattaccc	tgcatggtcg	420
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218	aggtttgacg	gtgtatctag	ccggaggtca	aggacaagt	gttaggaggg	atgtggctgg	540
220	ttcgttaatt	gcttcggac	cggtagtgtt	gatggctgt	tctttgcaa	acgcagttt	600
222	tgtataggtt	ccgattgaag	aggaagaaac	cccacccgg	agaaccaccc	gggtgcagca	660
224	gcagcagccg	gaggcgtctc	agtgcgtcga	ggttacgggg	agtggggccc	aggcgtgtga	720
226	gtcaaaccctc	caagggtgaa	atggtgagg	agggtgttgc	ttctacaatc	ttggaatgaa	780
228	tatgaacaat	tttcaattct	ccgggggaga	tatttacgt	atgagcggcg	gtagcggagg	840
230	aggtggtggc	ggtgcacta	gaccgcgtt	ttagagttt	agcgtttgg	tgacacaccc	900
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234	gcgaatatta	gttt					974
237	<210>	SEQ ID NO:	5				
238	<211>	LENGTH:	1071				
239	<212>	TYPE:	DNA				
240	<213>	ORGANISM:	Oryza sativa				
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246	catctgctcc	gaccgcagca	gccgtcgccg	ctgtcaccgc	tgtcgccgac	atccatgtc	120
248	aagatggagc	actccaagat	gtcacccgac	aagagccccg	tggcgaggg	agatcacgcg	180
250	ggagggagtg	gaagcggcgg	cgtcgccgt	gaccaccgc	cgtcgctgc	ggccatggtg	240
252	cccgctgagg	gtggcagcgg	cagcggccgc	ggttagtggct	cgggtgggccc	gacgcggcgc	300
254	ccgcgcgggc	gccccccccc	gtccaagaac	aagccgaagc	cgcgcatcat	cgtgacgcgc	360
256	gacagcccg	acgcgcgtca	ctcgacagt	ctcgaggtcg	ccggcgccgc	cgacgtcg	420
258	gactgcgtgg	ccgagtaacgc	ccgcccggc	gggcgcggcg	tgtcgctgc	gagcggcggc	480
260	ggcgcgtcg	tcaacgtggc	gtgcggcag	ccgggcgcgt	cgcgcgggg	cagcatggtg	540
262	gccacgtgc	ggggccgg	cgagatccta	tcttcacgg	gcacggctt	gccgcctccc	600
264	gcccacccg	gcgcgagcgg	cctcaccgt	ttccctctcg	gcccacccg	ccaggtgatc	660
266	ggcggcagcg	tgggtggccc	gctggtcgccc	gcccccccg	tgcgtccgtat	ggccgcctca	720
268	ttcgcgaacg	ccgtgtacga	gcccgtccgc	ctggaggggcg	aggaagagga	gtcgcggcgc	780
270	ccgcgcgcg	gaggcgaagc	acaagatcaa	gtggcacaat	cagctggacc	cccaggcgcag	840
272	caaccggcgg	cgtcacagt	ctccggcgt	acaggaggcg	acggcacccg	cgccgcgggt	900
274	ggcatgtcg	tctacaacct	cgccggaaat	gtggggaggct	atcagctccc	cgagacaac	960
276	ttcggaggtt	ggagcggcgc	cgccgcgcgc	ggagtcaaggc	caccgttctg	accatgtct	1020
278	tagcatccag	ttcaaaaatt	ctccaaat	agaattgcgc	agtgcagaag	c	1071
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284	<213>	ORGANISM:	Gossypium hirsutum				
286	<400>	SEQUENCE:	6				
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290	ggacgtccag	cgggatccaa	gaacaagccg	aaatcaccca	taatcggtgc	tcgcgacagt	120
292	cggaaactcg	tgagatccca	cgtgcgtcga	atctcttccg	gttcagacat	agttgactcg	180
294	gtgtggggct	acgcacggcg	gcccggccgt	ggcgtttgt	tactcagcgg	gaccgggtgcc	240
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298	ggtcggttcg	agattttatc	tttaaccggg	acttctctcc	caccgcacgc	accgcctgga	360
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302	gtgggaccgt	taatggcttc	aggtccagtc	gtattaatgg	ctgcacatgtt	cgccaaatgca	480
304	gtttacgata	ggttacctct	cgaagaagaa	gaccaccaa	ccgttcacga	acaacaacca	540
306	gcagcttcac	aatcatccgg	attaacccggc	agtggcggcg	gaaacaacaa	caactgtgga	600

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308 acaaccggaa ccggcgtagg cggcggcggc ggcggggttc ctttctataa tttgggacca 660
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 313 <210> SEQ ID NO: 7
 314 <211> LENGTH: 99
 315 <212> TYPE: PRT
 316 <213> ORGANISM: Arabidopsis thaliana
 318 <400> SEQUENCE: 7
 320 Ala Lys Pro Pro Ile Ile Val Thr Arg Asp Ser Pro Asn Ala Leu Arg
 321 1 5 10 15
 323 Ser His Val Leu Glu Val Ser Pro Gly Ala Asp Ile Val Glu Ser Val
 324 20 25 30
 326 Ser Thr Tyr Ala Arg Arg Gly Arg Gly Val Ser Val Leu Gly Gly
 327 35 40 45
 329 Asn Gly Thr Val Ser Asn Val Thr Leu Arg Gln Val Val Thr Leu His
 330 50 55 60
 332 Gly Arg Phe Glu Ile Leu Ser Leu Thr Gly Thr Val Leu Pro Pro Pro
 333 65 70 75 80
 335 Ala Pro Pro Gly Ala Gly Gly Leu Ser Ile Phe Leu Ala Gly Gly Gln
 336 85 90 95
 338 Gly Gln Val
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 343 <211> LENGTH: 99
 344 <212> TYPE: PRT
 345 <213> ORGANISM: Arabidopsis thaliana
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 355 Ser Thr Tyr Ala Thr Arg Arg Gly Cys Gly Val Cys Ile Ile Ser Gly
 356 35 40 45
 358 Thr Gly Ala Val Thr Asn Val Thr Ile Arg Gln Val Ile Thr Leu His
 359 50 55 60
 361 Gly Arg Phe Asp Ile Leu Ser Leu Thr Gly Thr Ala Leu Pro Pro Pro
 362 65 70 75 80
 364 Ala Pro Pro Gly Ala Gly Gly Leu Thr Val Tyr Leu Ala Gly Gly Gln
 365 85 90 95
 367 Gly Gln Val
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 372 <211> LENGTH: 107
 373 <212> TYPE: PRT
 374 <213> ORGANISM: Gossypium hirsutum
 376 <400> SEQUENCE: 9
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 381 Ser His Val Leu Glu Ile Ser Ser Gly Ser Asp Ile Val Asp Ser Val
 382 20 25 30
 384 Trp Gly Tyr Ala Arg Arg Gly Arg Gly Val Cys Val Leu Ser Gly
 385 35 40 45

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 01/06/2005
PATENT APPLICATION: US/10/783,710A TIME: 16:07:24

Input Set : D:\38-21(52743)B.rpt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:11; Xaa Pos. 1,3,5,7,8,14,16,22,23,24,26,28,29,30,31,33,34,37,41,44,45
Seq#:11; Xaa Pos. 46,47,49,51,53,56,57,60,61,62,63,64,65,66,67,68,70,73,77
Seq#:11; Xaa Pos. 85,95,98,99,100,104

VERIFICATION SUMMARY

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L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date --

L:634 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0

M:341 Repeated in SeqNo=11